

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): A transgenic bird
which is obtained as a G1 transgenic bird or an offspring thereof by: incubating a fertilized avian egg,
 - a) microinjecting, into the early embryo thereof at a stage except for and after the blastodermic stage just after egg laying, a replication-deficient retroviral vector coding for a desired protein,
 - b) allowing the egg to hatch out to thereby obtain a G0 transgenic chimeric bird, and
 - c) mating the G0 transgenic chimeric bird with another G0 transgenic chimeric bird or an offspring thereof or with a wild-type bird.
2. (original): The transgenic bird according to Claim 1
wherein the early embryo is at least 24 hours after the start of incubation.
3. (original): The transgenic bird according to Claim 2
wherein the early embryo is at least 48 hours after the start of incubation.

3
4. (currently amended): The transgenic bird according to Claim 1~~any one of Claims 1 to~~
wherein the desired protein is an antibody.

4
5. (currently amended): The transgenic bird according to Claim 1~~any one of Claims 1 to~~
wherein the bird is a chicken or a quail.

6. (currently amended): A transgenic bird
which is a G2 transgenic bird or an offspring thereof obtained by mating the G1
transgenic bird according to Claim 1~~any one of Claims 1 to 5~~ with a G0 transgenic bird, another
G1 transgenic bird or an offspring thereof, or with a wild-type bird.

7. (original): A method for constructing a G1 transgenic bird
which comprises incubating a fertilized avian egg,
a) microinjecting, into the early embryo thereof at a stage except for and after the
blastodermic stage just after egg laying, a replication-deficient retroviral vector coding for a
desired protein,
b) allowing the egg to hatch out to thereby obtain a G0 transgenic chimeric bird, and

c) mating the G0 transgenic chimeric bird with another G0 transgenic chimeric bird or an offspring thereof or with a wild-type bird.

8. (original): The method for constructing a transgenic bird according to Claim 7 wherein the early embryo is at least 24 hours after the start of incubation.

9. (original): The method for constructing a transgenic bird according to Claim 8 wherein the early embryo is at least 48 hours after the start of incubation.

10. (currently amended): The method for constructing a transgenic bird according to Claim 7~~any one of Claims 7 to 9~~ wherein the desired protein is an antibody.

11. (currently amended): The method for constructing a transgenic bird according to Claim 7~~any one of Claims 7 to 10~~ wherein the bird is a chicken or a quail.

12. (currently amended): The method for constructing a transgenic bird according to Claim 7~~any one of Claims 7 to 11~~

which comprises microinjecting a replication-deficient retroviral vector having a titer of not lower than 1×10^7 cfu/ml.

13. (original): The method for constructing a transgenic bird according to Claim 12

which comprises microinjecting a replication-deficient retroviral vector having a titer of not lower than 1×10^9 cfu/ml.

14. (currently amended): A method for constructing a transgenic bird

which comprises mating the G1 transgenic bird according to Claim 1~~any one of Claims 1 to 5~~ with a G0 transgenic bird, another G1 transgenic bird or an offspring thereof or with a wild-type bird to construct a G2 transgenic bird or an offspring thereof.

15. (currently amended): A method for producing a protein

which comprises extracting a desired protein from somatic cells, blood or eggs from a transgenic bird constructed by the method according to Claim 7~~any one of Claims 7 to 14~~.

16. (currently amended): A method for sorting out a reproductive lineage transgenic chimeric bird

which comprises collecting sperm samples from transgenic birds according to Claim 1~~any one of Claims 1 to 6~~ and testing them for the gene in the sperm.

17. (currently amended): The method for constructing a transgenic bird according to Claim 7~~any one of Claims 7 to 14~~

wherein the replication-deficient retroviral vector is a vector derived from Moloney murine leukemia virus.

18. (currently amended): The method for constructing a transgenic bird according to Claim 7~~any one of Claims 7 to 14~~

wherein the replication-deficient retroviral vector is VSV-G pseudotyped.

19. (currently amended): The method for constructing a transgenic bird according to Claim 7~~any one of Claims 7 to 14, 17 and 18~~

wherein the replication-deficient retroviral vector contains a non-retrovirus-derived gene.

20. (original): The method for constructing a transgenic bird according to Claim 19
wherein the non-retrovirus-derived gene is controlled under the chicken β -actin promoter.

21. (currently amended): The method for constructing a transgenic bird according to
Claim 19-~~or 20~~

wherein the non-retrovirus-derived gene codes an antibody.

22. (original): The method for constructing a transgenic bird according to Claim 21
wherein the antibody is a chimeric antibody.

23. (original): The method for constructing a transgenic bird according to Claim 22
wherein the chimeric antibody is scFv-Fc antibody.

24. (currently amended): The transgenic bird
which is constructed by the method according to Claim 7~~any one of Claims 7 to 14 and~~
~~17 to 23.~~

25. (original): An egg laid by the transgenic bird according to Claim 24
which contains not lower than 1 mg/100 g of the desired protein.

26. (original): An egg laid by the transgenic bird according to Claim 24
which contains not lower than 20 mg/100 g of the desired protein.

27. (original): An egg laid by the transgenic bird according to Claim 24

which contains not lower than 100 mg/100 g of the desired protein.

28. (original): A method for sorting out a reproductive lineage transgenic chimeric bird which comprises incubating a fertilized avian egg, microinjecting, into the early embryo thereof at a stage except for and after the blastodermic stage just after egg laying, a replication-deficient retroviral vector coding for a desired protein and confirming the gene coding for the desired protein in the sperm of the male G0 transgenic bird obtained by hatching.

29. (currently amended): A method for sorting out a transgenic bird which comprises confirming the expression of the desired protein in the blood of the transgenic bird according to Claim 1 ~~any one of Claims 1 to 6~~.

30. (original): A method for sorting out a G0 transgenic chimeric bird which comprises incubating a fertilized avian egg, microinjecting, into the early embryo thereof at a stage except for and after the blastodermic stage just after egg laying, a replication-deficient retroviral vector coding for a desired protein and confirming the expression of the desired protein in the blood of the G0 transgenic bird obtained by hatching.